

109TH CONGRESS  
1ST SESSION

# S. 361

To develop and maintain an integrated system of ocean and coastal observations for the Nation's coasts, oceans and Great Lakes, improve warnings of tsunamis and other natural hazards, enhance homeland security, support maritime operations, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

FEBRUARY 10, 2005

Ms. SNOWE (for herself, Mr. KERRY, Mr. STEVENS, Mr. INOUE, and Ms. COLLINS) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To develop and maintain an integrated system of ocean and coastal observations for the Nation's coasts, oceans and Great Lakes, improve warnings of tsunamis and other natural hazards, enhance homeland security, support maritime operations, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Ocean and Coastal  
5       Observation System Act of 2005”.

6       **SEC. 2. FINDINGS AND PURPOSES.**

7       (a) FINDINGS.—Congress finds the following:

1           (1) Ocean and coastal observations provide vital  
2           information for protecting human lives and property  
3           from marine hazards, enhancing national and home-  
4           land security, predicting weather and global climate  
5           change, improving ocean health and providing for  
6           the protection, sustainable use, and enjoyment of the  
7           resources of the Nation's coasts, oceans, and Great  
8           Lakes.

9           (2) The continuing and potentially devastating  
10          threat posed by tsunamis, hurricanes, storm surges,  
11          and other marine hazards requires immediate imple-  
12          mentation of strengthened observation and commu-  
13          nications systems to provide timely detection, assess-  
14          ment, and warnings to the millions of people living  
15          in coastal regions of the United States and through-  
16          out the world.

17          (3) The 95,000-mile coastline of the United  
18          States, including the Great Lakes, is vital to the Na-  
19          tion's prosperity, contributing over \$117 billion to  
20          the national economy in 2000, supporting jobs for  
21          more than 200 million Americans, handling \$700  
22          billion in waterborne commerce, and supporting com-  
23          mercial and sport fisheries valued at more than \$50  
24          billion annually.

1           (4) Safeguarding homeland security, conducting  
2           search and rescue operations, responding to natural  
3           and man-made coastal hazards such as oil spills and  
4           harmful algal blooms, and managing fisheries and  
5           other coastal activities require improved monitoring  
6           of the Nation's waters and coastline, including the  
7           ability to track vessels and to provide rapid response  
8           teams with real-time environmental conditions nec-  
9           essary for their work.

10          (5) While knowledge of the ocean and coastal  
11          environment and processes is far from complete, ad-  
12          vances in sensing technologies and scientific under-  
13          standing have made possible long-term and contin-  
14          uous observation from shore, from space, and in situ  
15          of ocean and coastal characteristics and conditions.

16          (6) Many elements of an ocean and coastal ob-  
17          serving system are in place, but require national in-  
18          vestment, consolidation, completion, and integration  
19          at Federal, regional, State, and local levels.

20          (7) The Commission on Ocean Policy rec-  
21          ommends a national commitment to a sustained and  
22          integrated ocean and coastal observing system and  
23          to coordinated research programs in order to assist  
24          the Nation and the world in understanding the  
25          oceans and the global climate system, enhancing

1 homeland security, improving weather and climate  
2 forecasts, strengthening management of ocean and  
3 coastal resources, improving the safety and efficiency  
4 of maritime operations, and mitigating marine haz-  
5 ards.

6 (8) In 2003, the United States led more than  
7 50 nations in affirming the vital importance of time-  
8 ly, quality, long-term global observations as a basis  
9 for sound decision-making, recognizing the contribu-  
10 tion of observation systems to meet national, re-  
11 gional, and global needs, and calling for strength-  
12 ened cooperation and coordination in establishing a  
13 Global Earth Observation System of Systems, of  
14 which an integrated ocean and coastal observing sys-  
15 tem is an essential part.

16 (b) PURPOSES.—The purposes of this Act are to pro-  
17 vide for—

18 (1) the development and maintenance of an in-  
19 tegrated ocean and coastal observing system that  
20 provides the data and information to ensure national  
21 security and public safety, support economic develop-  
22 ment, sustain and restore healthy marine ecosystems  
23 and the resources they support, enable advances in  
24 scientific understanding of the oceans, and strength-  
25 en science education and communication;

1           (2) implementation of research and development  
2           and education programs to improve understanding  
3           of the oceans and Great Lakes and achieve the full  
4           national benefits of an integrated ocean and coastal  
5           observing system;

6           (3) implementation of a data and information  
7           management system required by all components of  
8           an integrated ocean and coastal observing system  
9           and related research to develop early warning sys-  
10          tems; and

11          (4) establishment of a system of regional ocean  
12          and coastal observing systems to address local needs  
13          for ocean information.

14 **SEC. 3. DEFINITIONS.**

15       In this Act:

16           (1) COUNCIL.—The term “Council” means the  
17           National Ocean Research Leadership Council estab-  
18           lished under section 7902(a) of title 10, United  
19           States Code.

20           (2) OBSERVING SYSTEM.—The term “observing  
21           system” means the integrated coastal, ocean and  
22           Great Lakes observing system to be established by  
23           the Committee under section 4(a).

24           (3) NATIONAL OCEANOGRAPHIC PARTNERSHIP  
25           PROGRAM.—The term “National Oceanographic

1 Partnership Program” means the program estab-  
 2 lished under section 7901 of title 10, United States  
 3 Code.

4 (4) INTERAGENCY PROGRAM OFFICE.—The  
 5 term “interagency program office” means the office  
 6 established under section 4(d).

7 **SEC. 4. INTEGRATED OCEAN AND COASTAL OBSERVING**  
 8 **SYSTEM.**

9 (a) ESTABLISHMENT.—The President, acting  
 10 through the Council, shall establish and maintain an inte-  
 11 grated system of ocean and coastal observations, data  
 12 communication and management, analysis, modeling, re-  
 13 search, and education designed to provide data and infor-  
 14 mation for the timely detection and prediction of changes  
 15 occurring in the ocean and coastal environment that im-  
 16 pact the Nation’s social, economic, and ecological systems.  
 17 The observing system shall provide for long-term, contin-  
 18 uous and quality-controlled observations of the coasts,  
 19 oceans, and Great Lakes for the following purposes:

20 (1) Improving the health of the Nation’s coasts,  
 21 oceans, and Great Lakes.

22 (2) Protecting human lives and livelihoods from  
 23 hazards such as tsunamis, hurricanes, coastal ero-  
 24 sion, and fluctuating Great Lakes water levels.

1           (3) Supporting national defense and homeland  
2 security efforts.

3           (4) Understanding the effects of human activi-  
4 ties and natural variability on the state of the coasts  
5 and oceans and the Nation's socioeconomic well-  
6 being.

7           (5) Measuring, explaining, and predicting envi-  
8 ronmental changes.

9           (6) Providing for the sustainable use, protec-  
10 tion, and enjoyment of ocean and coastal resources.

11          (7) Providing a scientific basis for implementa-  
12 tion and refinement of ecosystem-based manage-  
13 ment.

14          (8) Educating the public about the role and im-  
15 portance of the oceans and Great Lakes in daily life.

16          (9) Tracking and understanding climate change  
17 and the ocean and Great Lakes' roles in it.

18          (10) Supplying critical information to marine-  
19 related businesses such as marine transportation,  
20 aquaculture, fisheries, and offshore energy produc-  
21 tion.

22          (11) Supporting research and development to  
23 ensure continuous improvement to ocean and coastal  
24 observation measurements and to enhance under-

1 standing of the Nation's ocean and coastal re-  
2 sources.

3 (b) SYSTEM ELEMENTS.—In order to fulfill the pur-  
4 poses of this Act, the observing system shall consist of the  
5 following program elements:

6 (1) A national program to fulfill national obser-  
7 vation priorities, including the Nation's ocean con-  
8 tribution to the Global Earth Observation System of  
9 Systems and the Global Ocean Observing System.

10 (2) A network of regional associations to man-  
11 age the regional ocean and coastal observing and in-  
12 formation programs that collect, measure, and dis-  
13 seminate data and information products to meet re-  
14 gional needs.

15 (3) A data management and communication  
16 system for the timely integration and dissemination  
17 of data and information products from the national  
18 and regional systems.

19 (4) A research and development program con-  
20 ducted under the guidance of the Council.

21 (5) An outreach, education, and training pro-  
22 gram that augments existing programs, such as the  
23 National Sea Grant College Program and the Cen-  
24 ters for Ocean Sciences Education Excellence pro-  
25 gram, to ensure the use of the data and information



1       for improving public education and awareness of the  
2       Nation's oceans and building the technical expertise  
3       required to operate and improve the observing sys-  
4       tem.

5       (c) COUNCIL FUNCTIONS.—In carrying out respon-  
6       sibilities under this section, the Council shall—

7           (1) serve as the oversight body for the design  
8       and implementation of all aspects of the observing  
9       system;

10          (2) adopt plans, budgets, and standards that  
11       are developed and maintained by the interagency  
12       program office in consultation with the regional as-  
13       sociations;

14          (3) coordinate the observing system with other  
15       earth observing activities including the Global Ocean  
16       Observing System and the Global Earth Observing  
17       System of Systems;

18          (4) coordinate and administer programs of re-  
19       search and development and education to support  
20       improvements to and the operation of an integrated  
21       ocean and coastal observing system and to advance  
22       the understanding of the oceans;

23          (5) establish pilot projects to develop technology  
24       and methods for advancing the development of the  
25       observing system;

1           (6) support the development of institutional  
2 mechanisms to further the goals of the program and  
3 provide for the capitalization of the required infra-  
4 structure;

5           (7) provide, as appropriate, support for and  
6 representation on United States delegations to inter-  
7 national meetings on ocean and coastal observing  
8 programs, including those under the jurisdiction of  
9 the International Joint Commission involving Cana-  
10 dian waters; and

11           (8) in consultation with the Secretary of State,  
12 coordinate relevant Federal activities with those of  
13 other nations.

14       (d) INTERAGENCY PROGRAM OFFICE.—The Council  
15 shall establish an interagency program office to be known  
16 as “OceanUS”. The interagency program office shall be  
17 responsible for program planning and coordination of the  
18 observing system. The interagency program office shall—

19           (1) prepare annual and long-term plans for con-  
20 sideration by the Council for the design and imple-  
21 mentation of the observing system that promote col-  
22 laboration among Federal agencies and regional as-  
23 sociations in developing the global and national ob-  
24 serving systems, including identification and refine-

1       ment of a core set of variables to be measured by  
2       all systems;

3           (2) coordinate the development of agency prior-  
4       ities and budgets for implementation of the observ-  
5       ing system, including budgets for the regional asso-  
6       ciations;

7           (3) establish and refine standards and protocols  
8       for data management and communications, including  
9       quality standards, in consultation with participating  
10      Federal agencies and regional associations;

11          (4) develop a process for the certification of the  
12      regional associations and their periodic review and  
13      recertification; and

14          (5) establish an external technical committee to  
15      provide biennial review of the observing system.

16      (e) LEAD FEDERAL AGENCY.—The National Oceanic  
17      and Atmospheric Administration shall be the lead Federal  
18      agency for implementation and operation of the observing  
19      system. Based on the plans prepared by the interagency  
20      program office and adopted by the Council, the Adminis-  
21      trator of the National Oceanic and Atmospheric Adminis-  
22      tration shall—

23          (1) coordinate implementation, operation and  
24      improvement of the observing system;

1           (2) establish efficient and effective administra-  
2           tive procedures for allocation of funds among Fed-  
3           eral agencies and regional associations in a timely  
4           manner and according to the budget adopted by the  
5           Council;

6           (3) implement and maintain appropriate ele-  
7           ments of the observing system;

8           (4) provide for the migration of scientific and  
9           technological advances from research and develop-  
10          ment to operational deployment;

11          (5) integrate and extend existing programs and  
12          pilot projects into the operational observation sys-  
13          tem; and

14          (6) certify regional associations that meet the  
15          requirements of subsection (f).

16          (f) REGIONAL ASSOCIATIONS OF OCEAN AND COAST-  
17          AL OBSERVING SYSTEMS.—The Administrator of the Na-  
18          tional Oceanic and Atmospheric Administration may cer-  
19          tify one or more regional associations to be responsible  
20          for the development and operation of regional ocean and  
21          coastal observing systems to meet the information needs  
22          of user groups in the region while adhering to national  
23          standards. To be certifiable by the Administrator, a re-  
24          gional association shall—

1           (1) demonstrate an organizational structure ca-  
2       pable of supporting and integrating all aspects of  
3       ocean and coastal observing and information pro-  
4       grams within a region;

5           (2) operate under a strategic operations and  
6       business plan that details the operation and support  
7       of regional ocean and coastal observing systems pur-  
8       suant to the standards established by the Council;

9           (3) provide information products for multiple  
10      users in the region;

11          (4) work with governmental entities and pro-  
12      grams at all levels within the region to provide time-  
13      ly warnings and outreach and education to protect  
14      the public; and

15          (5) meet certification standards developed by  
16      the interagency program office in conjunction with  
17      the regional associations and approved by the Coun-  
18      cil.

19      (g) CIVIL LIABILITY.—For purposes of section  
20   1346(b)(1) and chapter 171 of title 28, United States  
21   Code, the Suits in Admiralty Act (46 U.S.C. App. 741  
22   et seq.), and the Public Vessels Act (46 U.S.C. App. 781  
23   et seq.), any regional ocean and coastal observing system  
24   that is a designated part of a regional association certified  
25   under this section shall, in carrying out the purposes of

1 this Act, be deemed to be part of the National Oceanic  
2 and Atmospheric Administration, and any employee of  
3 such system, while acting within the scope of his or her  
4 employment in carrying out such purposes, shall be  
5 deemed to be an employee of the Government.

6 **SEC. 5. RESEARCH AND DEVELOPMENT AND EDUCATION.**

7 The Council shall establish programs for research  
8 and development and education for the ocean and coastal  
9 observing system, including projects under the National  
10 Oceanographic Partnership Program, consisting of the fol-  
11 lowing:

12 (1) Basic research to advance knowledge of  
13 ocean and coastal systems and ensure continued im-  
14 provement of operational products, including related  
15 infrastructure and observing technology.

16 (2) Focused research projects to improve under-  
17 standing of the relationship between the coasts and  
18 oceans and human activities.

19 (3) Large scale computing resources and re-  
20 search to advance modeling of ocean and coastal  
21 processes.

22 (4) A coordinated effort to build public edu-  
23 cation and awareness of the ocean and coastal envi-  
24 ronment and functions that integrates ongoing ac-  
25 tivities such as the National Sea Grant College Pro-

1        gram and the Centers for Ocean Sciences Education  
2        Excellence.

3    **SEC. 6. INTERAGENCY FINANCING.**

4        The departments and agencies represented on the  
5    Council are authorized to participate in interagency fi-  
6    nancing and share, transfer, receive, obligate, and expend  
7    funds appropriated to any member of the Council for the  
8    purposes of carrying out any administrative or pro-  
9    grammatic project or activity under this Act or under the  
10   National Oceanographic Partnership Program, including  
11   support for the interagency program office, a common in-  
12   frastructure, and system integration for a ocean and  
13   coastal observing system. Funds may be transferred  
14   among such departments and agencies through an appro-  
15   priate instrument that specifies the goods, services, or  
16   space being acquired from another Council member and  
17   the costs of the same.

18   **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

19        There are authorized to be appropriated to the Na-  
20   tional Oceanic and Atmospheric Administration for the  
21   implementation of an integrated ocean and coastal observ-  
22   ing system under section 4, and the research and develop-  
23   ment program under section 5, including financial assist-  
24   ance to the interagency program office, the regional asso-  
25   ciations for the implementation of regional ocean and

1 coastal observing systems, and the departments and agen-  
2 cies represented on the Council, such sums as may be nec-  
3 essary for each of fiscal years 2006 through 2010. At least  
4 50 percent of the sums appropriated for the implementa-  
5 tion of the integrated ocean and coastal observing system  
6 under section 4 shall be allocated to the regional associa-  
7 tions certified under section 4(f) for implementation of re-  
8 gional ocean and coastal observing systems. Sums appro-  
9 priated pursuant to this section shall remain available  
10 until expended.

11 **SEC. 8. REPORTING REQUIREMENT.**

12 Not later than March 31, 2010, the President, acting  
13 through the Council, shall transmit to Congress a report  
14 on the programs established under sections 4 and 5. The  
15 report shall include a description of activities carried out  
16 under the programs, an evaluation of the effectiveness of  
17 the programs, and recommendations concerning reauthor-  
18 ization of the programs and funding levels for the pro-  
19 grams in succeeding fiscal years.

○